



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,159	03/31/2004	R. Scott Stephens	WEYE121926/25350	8194
28624	7590	07/19/2006	EXAMINER	
WEYERHAEUSER COMPANY INTELLECTUAL PROPERTY DEPT., CH 1J27 P.O. BOX 9777 FEDERAL WAY, WA 98063			CORDRAY, DENNIS R	
			ART UNIT	PAPER NUMBER
			1731	

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/815,159

Applicant(s)

STEPHENS ET AL.

Examiner

Dennis Cordray

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

The Affidavit filed on 10 March, 2006 under 37 CFR 1.131 is sufficient to overcome the Neogi reference.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-8 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Westland et al (6572919) in view of Casey (Pulp and Paper Chemistry and Chemical Technology, 3rd ed, vol III, John Wiley & sons, 1981) and Biermann (Essentials of Pulping and Papermaking, Academic Press, Inc., 1993), and further in view of Sprang et al (5571604).

Westland et al discloses crosslinked cellulosic fibers obtained by a method comprising: applying a crosslinking agent and a crosslinking catalyst to a web of fibers, separating the web into individualized fibers, and heating the individualized fibers to provide individualized crosslinked fibers (col 5 lines 41-45; col 6, lines 4-7 and 34-36). Westland also discloses the use of citric acid as a crosslinking agent (col 4, line 64 to col 5, line 2) and sodium hypophosphite as a crosslinking catalyst (col 6, lines 46-47). Westland further discloses that the fibers can be used to form absorbent products such

Art Unit: 1731

as diapers, feminine care products, incontinence products and toweling (col 7, lines 11-17).

Casey et al teaches that paper can be whitened by adding a blue dye because the dye is complementary to the natural yellow tint of pulp (p 1833, last par bridging to p 1834). Although the addition of a dye reduces total reflectance, Casey teaches that yellowness is about four times as important to the visual perception of whiteness than total reflectance (p 1835, 2nd full par), thus a reduction of yellowness and an increase in whiteness is achieved by adding a blue dye. Casey also teaches that the average person prefers a blue-white to a yellowish white (p 1835, next to last par).

Biermann teaches that blue dye is often added to pulp to offset the tendency for pulp to be yellow (p 197, left col, 2nd par), thus the use of a whitening agent to whiten pulp is well known.

Sprang et al discloses an absorbent fibrous nonwoven structure comprising cellulosic fibers (Abs; col 6, lines 29-30). Sprang et al teaches that chemical additives, such as pigments, dyes or crosslinking agents, can be added to a fibrous web (col 7, lines 31-44). Sprang et al also teaches addition of crosslinking agents to the pulp, thus dyed and crosslinked fibers are known in prior art (col 6, lines 51-52).

Azo dyes are the largest class of organic dyes and are widely used in the textile and paper industries, thus are well known in the art (for evidence, see Chudgar et al, R.J. "Dyes, Azo" Kirk-Othmer Encyclopedia of Chemical Technology, John Wiley & Sons, 2003, Introduction).

The art of Westland et al, Casey, Biermann, Sprang et al and the instant invention are analogous in that they are from the art of making fibrous absorbents. It would have been obvious at the time the invention was made to a person with ordinary skill in the art to add a blue azo dye to the formed web to increase whiteness of the fibrous product in the process of Westland et al in view of Casey and Biermann and further in view of Sprang et al to make the product more preferable to customers.

Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Westland et al, Casey, Biermann and Sprang et al, as applied to claims 1-3 5-8 and 10-14 above, and further in view of von der Eltz et al (5512064).

Westland et al, Casey, Biermann and Sprang et al do not disclose the use of an azo metal complex dye as a blue dye.

Von der Eltz et al teach that azo dyes and azo metal complex dyes are well known art and are completely familiar to one skilled in the art (col 5, lines 10-19). In the absence of limiting parameters not revealed in the current disclosure it would have been obvious at the time the invention was made to a person with ordinary skill in the art to add a blue azo metal complex dye as a functionally equivalent option to the formed web to increase whiteness of the fibrous product in the process of Westland et al in view of Casey, Biermann and Sprang et al and further in view of von der Eltz et al to make the product more preferable to customers.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11

Art Unit: 1731

F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-14 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3-6, 9-14 and 17-19 of copending Application No. 10/813957.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant invention fully encompasses the referenced claims of the copending application.

- Claim 1 of the instant invention is drawn to a product, whitened crosslinked cellulosic fibers, and does not preclude the use of a bleaching agent as claimed in Claim 1 of the copending application. Claim 1 of the copending application is also drawn to a product, whitened crosslinked cellulosic fibers.
- Claims 2-5 of the instant invention read the same as claims 3-6 of the copending application after appropriate changes in the referenced claim numbers.
- Claim 6 of the instant invention does not preclude the use of a bleaching agent as specified in Claim 9 of the copending application and, other than the additional step of applying a bleaching agent, the claims read identically.

- Claims 7-11 of the instant application read the same as Claims 10-14 of the copending application after appropriate changes in the referenced claim numbers.
- Claims 12-14 of the instant application read identically to Claims 17-19 of the copending application after appropriate changes in the referenced claim numbers.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

In response to the Affidavit filed on 10 March, 2006 under 37 CFR 1.131, the rejections based on the Neogi reference are withdrawn. However, upon further consideration, a new ground(s) of rejection is made as detailed above.

Applicants' arguments filed 6 April, 2006 have been fully considered but they are not persuasive. The reasons are as follows:

Applicants argue that Neogi teaches that addition of blue dye to fluff pulp to improve whiteness is not well known, thus the addition of blue dye to pulp to offset yellowness would not be obvious to one skilled in the art. As detailed in the above rejections, Biermann teaches that blue dye is often added to pulp to offset the tendency for pulp to be yellow (p 197, left col, 2nd par), thus the use of a blue dye to whiten pulp is well known. The use of blue dye to increase whiteness is also known in other papermaking processes, as admitted by Applicant on p 2 in quoting Neogi and also in the instant Specification on p 3, lines 17-18, "The addition of small amounts of blue

Art Unit: 1731

colorant to improve whiteness appearance is known in other fields, such as papermaking.” As also noted above, Casey teaches that the average person prefers a blue-white to a yellowish white (p 1835, next to last par), thus providing motivation to use the blue dye. There is ample evidence and motivation in the prior art that would suggest to one of ordinary skill in the art that addition of blue dye to cellulosic fibers, whether in pulp or sheet form, would increase their whiteness and make them more preferable to consumers and that such a process could be done with a reasonable expectation of success. As also detailed above, combining dyes with crosslinking agents is well known.

Also note that Claim 1 does not recite “fluff pulp” or any other kind of pulp, but uses the broader designation of “cellulosic fibers.”

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Cordray whose telephone number is 571-272-8244. The examiner can normally be reached on M - F, 7:30 -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1731

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



DRC


STEVEN P. GRIFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700